

see packet 2 for enclosure

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THRU: Timothy C. Johnson, Section Leader
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FROM: Charles H. Peterson
 Engineering Branch
 Division of Waste Management, WMEG

SUBJECT: POTENTIAL RADIONUCLIDE RELEASES FROM SPENT FUEL WASTE PACKAGES. AN ENVIRONMENTAL ASSESSMENT REVIEW WORKING PAPER

As a result of our preliminary work on review of Draft 4 of the DOE Environmental Assessment documents for potential Salt sites, we concluded that a comprehensive comparison of the radionuclide content of waste package with the limits in 40 CFR Part 191 (Proposed) and 10 CFR Part 60 was needed. Such a comparison for spent fuel waste packages is provided in the attached enclosure. The approach taken is to determine whether release of the total amount of each radionuclide present at various times after discharge of the spent fuel from a reactor would exceed either limit.

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We find that in some cases the EPA limits govern and in others the NRC limits govern. For many radionuclides, the total amount present was small enough that even if it were released at one time, the EPA 10,000 year cumulative limit would not be exceeded. Some constraint on release is required for the rest of the radionuclides listed. Several actinides increase with time to exceed limits.

We would appreciate receiving comments from your section on the enclosure.



Charles H. Peterson,
Project Manager
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Enclosure:
As stated

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